

DRAFT

**SUPPLEMENT
to the
MITIGATED NEGATIVE DECLARATION
for**

**SONOMA COAST STATE BEACH
SONOMA COAST TRAIL REHABILITATION & DEVELOPMENT
PROJECT**

State Clearinghouse # 2001062029

August 2005

Lead Agency



State of California
DEPARTMENT OF PARKS AND RECREATION

SUPPLEMENT TO A MITIGATED NEGATIVE DECLARATION

PROJECT: Sonoma Coast Trail Rehabilitation and Development Project
Sonoma County, California

LEAD AGENCY: California Department of Parks and Recreation (DPR)

INTRODUCTION AND REGULATORY GUIDANCE

A Supplement to the Final Mitigated Negative Declaration (MND) for the Sonoma Coast Trail Rehabilitation and Development Project has been prepared by the California Department of Parks and Recreation (DPR). It will disclose changes in project conditions and related mitigations that would require the preparation of a subsequent MND (per described in CCR §15162). However, the previous MND can be made adequate for the project in the changed situation, with only minor changes and additions to the previously adopted MND for this project, in accordance with CCR §15163(a)(1 & 2). This Supplement only contains that information necessary to make the previous MND adequate for the project as revised (CCR §15163(b)). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 *et seq.*, and the State CEQA Guidelines, California Code of Regulations (CCR) §15000 *et seq.*

This Supplement to the Final MND will receive the same kind of notice and public review given to a draft MND, under CCR §15087 *et seq.*, and will be filed with the Office of Planning and Research/State Clearinghouse (OPR).

The Project Description and Summary of Mitigation Measures sections below reflect changes as specified in the Corrections and Additions section of this document.

LEAD AGENCY

The lead agency is the public agency with primary approval authority over the proposed project. In accordance with CEQA Guidelines §15051(b)(1), "the lead agency will normally be an agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The lead agency for the proposed project is DPR.

SUMMARY OF FINDINGS

Based on this Initial Study and environmental review and analysis contained in the Draft and Final MND for this project, it was determined that the proposed project would not have any significant impacts on the environment, once all proposed mitigation measures have been implemented. This conclusion is supported by the findings indicated below.

- There was no potential for adverse impacts on hazards and hazardous materials, mineral resources, utilities/service systems, air quality, population/housing, or transportation/traffic associated with the proposed project.
- Potential adverse impacts resulting from the proposed project were found to be less than significant in the following areas: aesthetics, agricultural resources, public services.
- Full implementation of the proposed mitigation measures included in this MND would reduce potential project-related adverse impacts on biological resources, cultural resources, geology and soils, hydrology and water quality, land use and planning, noise, and recreation to a less than significant level.

AVAILABILITY OF DOCUMENTS:

This Supplement to the MND for the Sonoma Coast Trail Rehabilitation and Development Project, along with a copy of the original MND for this project, will be available throughout the 30-day public review period at the following locations:

- Guerneville Public Library
Armstrong Woods Road
Guerneville, CA 95446
- California Department of Parks & Recreation
North Bay District Headquarters
25381 Steelhead Blvd.
Duncans Mills, CA 95430
- Department of Parks & Recreation
Northern Service Center
One Capital Mall-Suite 410
Sacramento, CA 95814
- CA Department of Parks & Recreation website
http://www.parks.ca.gov/default.asp?page_id=981

The Notice of Determination for the originally certified MND on this project was filed on 9/7/01 (SCH#2001062029). This Supplement will be appended to the originally certified Final MND following filing of the NOD and will be available by request, along with all supporting materials, at DPR's Northern Service Center and North Bay District Headquarters office.

PROJECT DESCRIPTION:

SONOMA COAST TRAIL REHABILITATION AND DEVELOPMENT PROJECT, SONOMA COAST STATE BEACH

PURPOSE OF PROJECT

(Corrections and additions indicated below have been incorporated into this section.)

The Sonoma Coast Trail Rehabilitation and Development Project consists of several interrelated and interconnected sub-projects that were identified and designed by The California Department of Parks and Recreation (DPR). This document addresses and reviews these sub-projects as one for the purposes of compliance under the California Environmental Quality Act. Each of these sub-projects contains numerous work elements, which are identified in the Project Description section of this document. Phase I, which was discussed and evaluated in the original 9/7/01 MND, consists of two sub-projects. Phase I work was completed in 2004. The first sub-project was funded through the Department's Capital Outlay program and was identified as "Sonoma Coast State Beach - Trail Rehabilitation and Development" (Coastal Trail). The second sub-project was funded from the Department's "Deferred Maintenance Bond Funds" and was identified as "Repair Coastal Access Trails" (Beach Access Trails). Phase II is a continuation of the Coastal Trail portion of Phase I and is funded by a grant from the California Coastal Conservancy. It focuses on the Kortum Trail between Goat Rock Beach and Wright's Beach. Phase II work is addressed in this Supplement to the MND. Collectively, the entire project as proposed and reviewed under this supplemental environmental document is called the Sonoma Coast Trail Rehabilitation and Development Project. This Draft Supplement to the MND for the Sonoma Coast Trail Rehabilitation and Development Project, along with the previously adopted Final MND (SCH#2001062029), will constitute the Final MND for the Sonoma Coast Trail Rehabilitation and Development Project at Sonoma Coast State Beach, following public review and incorporation of any resulting changes.

The existing coastal trail system has been developed over a number of years without an overall plan. This has resulted in poorly located, steep and narrow trails often with precipitous drop-offs. The situation has also encouraged visitors to create their own "volunteer" trails that are not designed or located according to any standards. The poorly aligned trails cause erosion and other resource damage. Many segments of this trail are in seasonal wetlands, making for difficult conditions during the winter and spring months. Continued use during this time of year is harmful to wetland flora, degrades water quality, increases erosion of trail surface and leads to gullying in some instances, as hikers enlarge the area of impact in attempts to avoid wet areas. Interpretation and way-finding information is minimal at best and is in need of updating and enhancement.

SCOPE OF PROJECT

(Corrections and additions indicated below have been incorporated into this section.)

The Sonoma Coast Trail Rehabilitation and Development Project proposes to: create approximately 2.3 miles of newly mowed trail, rehabilitate approximately 2.1 miles of

existing trail, realign approximately 540 linear feet (l.f.) of trail, install 4,650 l.f. hardened trail surface to meet ADA (Americans with Disabilities Act) compliance, install 4,260 l.f. of new boardwalk, replace four bridges, install three new bridges, install six new interpretive panels, replace three existing restrooms, restripe one parking area, and regrade another parking area. All work will be performed within public areas of the Sonoma Coast State Beach, Sonoma County.

PROJECT CONSTRUCTION

(Corrections and additions indicated below have been incorporated into this section.)

Work elements of the Sonoma Coast Trail Rehabilitation and Development project are described below in separate sections for each sub-project. The elements are identified in consecutive order and combined for identification on the attached maps (L- designated map numbers indicate work items planned for Phase II). More detailed plans can be obtained from: California State Parks, North Bay District Headquarters, P.O. Box 123, 25381 Steelhead Blvd., Duncans Mills, CA 95430.

BEACH ACCESS TRAILS SUB-PROJECT

The purpose of this sub-project is to conduct repair and maintenance of existing beach access trails within the Sonoma Coast State Beach. The existing trails are eroded, and many of the support elements such as, steps, retaining walls, puncheons and surfaces are deteriorating or failed. Most of these trail sections will require *Trio* maintenance, which includes brushing trail to edge, cleaning out small trail side ditches, and reconditioning tread surfaces which should occur annually to maintain safe access. Reconditioning involves pulling existing displaced gravel from the sides of the trail to center depressions. All of this work will be done with hand tools and hand held equipment. New gravel fill maybe brought into areas that are not designated as wetlands. No new excavation or fill placement will occur in any areas that are designated as wetlands. When replacing retaining walls, excavation will be required to remove the old structure below grade. Some disturbance may occur 4'-6' uphill or downhill of proposed new structures. Proposed work items are specifically identified on the attached mapping. Work will be performed by State Parks trained trail crews.

1. Russian Gulch: The parking lot adjacent to this trail head will be graded to displace runoff away from trailhead and restroom facility. Currently runoff drains from the parking lot in two directions. In one direction, the water runs directly down the middle of the trail entrance, causing the restroom to be closed. Regrading of the parking area will add fill to the lower end, resulting in a redirection of sheet flow toward the east and upper end of the parking lot where the flow will combine with existing runoff. No specific work is proposed for the trail itself., other than periodic trimming of vegetation that may overgrow the trail surface.
2. Blind Beach: This trail is in relatively good condition, however, some *Trio* maintenance will be required and the cable steps at base of trail will be replaced.

3. Shell Beach: *Trio* maintenance will be required, some steps have shifted and will be corrected or replaced. The cable steps at base of trail have recently been reinstalled to reduce a potential safety hazard for park visitors.
4. Furlong Gulch/Drainage #5: This drainage crossing will consist of one wood bridge of approximately 105 l.f. and one boardwalk-type bridge of approximately 18 l.f. The larger bridge will be 8 feet wide and require concrete abutments. The boardwalk-type bridge will be 6 feet wide and be supported by wood pilings. A 3 foot wide trail connecting the two bridges and the existing beach access trail will be constructed. Wood girders for the larger bridge will be air-lifted by helicopter onto the concrete abutments. Concrete will be transported to the abutment locations from a pump truck located at the end of Grill Road. The construction zone effect will consist of approximately 400 s.f. at each abutment and 3 feet on each side of the boardwalk-type bridge and new trail. The abutment excavation will be completed with small mechanical equipment and hand labor.
5. Carlevaro Way; The middle of this trail segment is very steep and will require the installation of steps to assist visitors with safe access. The switchback will be reconstructed to allow for a smoother, safer turn. *Trio* maintenance and tread reconstruction will be required on the upper and lower segments of this trail.
6. Duncan's Landing: Currently parking lot drainage runoff flows down the trailhead and middle of trail; a drain dip or water bar will be installed at top of trailhead to prevent further trail degradation. This parking lot runoff has severely eroded the trail; to correct this condition the trail tread will be reconstructed and repaired to a flat level surface. Trail tread reconstruction will involve cutting a six-inch wide in-board ditch along the upper portion of the trail. Water will then flow from the inboard ditch directly into an existing drainage swale that is currently covered with ice plant toward the bottom of the trail. Note: this trail section passes through sensitive plant species habitat. Mitigation measures are proposed to reduce impacts to a less than significant level.
7. Duncans Cove (north); Parking lot runoff has been allowed to drain down middle of trail, this has required tread surfacing and *Trio* maintenance to correct. A drain dip at top of parking lot will correct this problem for the future. This work was recently completed to address public safety issues.
8. Duncan's Cove (south): This trail is in poor condition and will require several treatments to correct. All trail tread will be reconstructed; the switchback will be adjusted to provide safer transition. The retaining walls have failed and will be replaced. The timber steps and cable steps will be replaced, as they are damaged. Note: this trail segment traverses through wetlands. Work will avoid fill and excavation in any wetland areas.
9. Portuguese North; this trail is simple and in good condition, however, *Trio* maintenance will be required regularly to maintain safe access.

10. Portuguese South: Although the main structures on this trail are in good condition, the tread surface will be repaired and *Trio* maintenance will be required. Also the cable steps at base of the trail will be replaced to provide safer smooth transition to sand. This trail traverses through wetlands. Work will avoid fill and excavation in any wetland areas.
11. Carmet North; the existing cable steps at base of trail have washed away and are severely eroded, they will be replaced and all step and tread surfaces will be reconditioned or replaced.
12. Carmet South: This trail has a small failed retaining structure that will be replaced. The switchback will be adjusted to provide a smoother safer transition to the next leg. All surfaces and treads will be reconditioned and the cable steps at base of trail will be replaced, as they were damaged and have previously been removed. This trail traverses through wetlands. Work will avoid fill and excavation in any wetland areas.
13. Marshall Gulch; This is a short trail segment that needs surfacing and tread maintenance as well as adjusting the switchback to function better. Steps at base of trail will be replaced.
14. Coleman: This trail is in poor condition and will require extensive work and resources to bring it up to current standards. The major portion of the work will be reconstruction of the existing rock retaining walls and construction of steps in the middle segment of trail. Steps at base of trail will be replaced and all trail tread will be surfaced.
15. Miwok: Built in the early 1970's, the culvert portion has failed and is not up to standards; this culvert will be replaced with a 12' puncheon. On the lower leg a retaining wall is failing and will be replaced. All tread surfaces will be reconditioned and steps will be replaced if necessary. This trail traverses through wetlands. Work will avoid fill and excavation in any wetland areas.
16. North Salmon #2; this trail is in good condition and will require minimal work. Cable steps at base of trail will be replaced.
17. North Salmon #1; this trail segment is in poor condition and will require reconstruction of all retaining walls to return it to DPR standards. The trailhead will be realigned to better accept visitors from the parking lot. The steps at the base of trail will be replaced.
18. Bodega Head: *Trio* maintenance may be required on the trail surface.
19. Pomo Canyon Trail: This trail has several small puncheons that are in good condition, however, they need some rehabilitation at footings to assure their long life span. One new puncheon will be installed at the failed culvert washout as

shown on plan. The entire trail will need *Trio* maintenance. This trail traverses through wetlands. Work will avoid fill and excavation in any wetland areas.

COASTAL TRAIL SUB-PROJECT

The intent of this sub-project is to improve visitor safety, reduce existing impacts to resources, enhance interpretation and way-finding and improve the visitor's recreational experience. The repairs to the beach access trails will require the same *Trio* maintenance mentioned above with the addition of timber trail steps installed within the existing trail tread. In Phase II, in order to comply with current ADA standards, four segments of trail will be treated with the soil stabilizing enzyme Perma-Zyme. Perma-Zyme is a non-toxic formulation of enzyme-rich materials manufactured through a natural fermentation process using sugars and other 100% natural, organic compounds. When mixed with water and applied during compaction, the enzymes act on the soil's organic fines through a catalytic bonding process which produces a strong, durable, water resistant surface. Perma-Zyme will be applied to the top four (4) inches of native soil on 1,850 l.f. of existing trail. An additional 1,800 l.f. of existing gravel road, which is used as trail, will be rehabilitated and compacted to meet ADA standards. See attached mapping for project locations.

20. Information Node #1; Stabilized decomposed granite area approximately 200 s.f. adjacent to south side of existing parking lot. Two interpretive panels will be installed in dark brown metal frames. Construction zone effect will be approximately 250 s.f., small mechanical rollers will be used with augers and hand equipment.
21. New Trail from Information Node #1 to Blind Beach Parking Lot; Mow approximately 3,300 l.f. of trail adjacent to existing paved road. Where eroded areas or drainages extend up the slope to the road, pedestrians will be directed onto the road for the short distance. Construction zone effect will be only the 3 foot wide mowed trail area.
22. Blind Beach Comfort Station & ADA Access Route; Demolish existing concrete block (150 s.f.) vault comfort station and replace with wood sided (150 s.f.) vault comfort station. Construction zone effect will include approximately 250 s.f. of area. The service road to the comfort station will be modified to provide an ADA accessible route in the center of the service road with gravel on the edges. Construction equipment will include concrete trucks on the service road and medium sized tractors for demolition and construction.
23. Goat Rock Trail Realignment; Construct approximately 880 l.f. of new trail up a slope near the existing trail to reduce the trail gradient through the use of switchbacks. The trail tread will be approximately 36 inches wide with a construction zone effect including approximately 3 feet on either side of the trail along it's entire length. The final trail surface will be native soil and will be maintained be mowing.

L-6. Install 12 ft. puncheon across drainage.

Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 265 feet in length along the existing trail alignment, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

Trail Realignment and new boardwalk approximately 210 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade.

Close old trail, approximately 400 feet, 4-feet wide, and restore area to Coastal Prairie habitat.

L-7. Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 570 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

Close old trail, approximately 95 feet, 3-feet wide, and restore area to Coastal Prairie habitat.

L-8. Drainage #1: Remove existing wood bridge and install new wood bridge of approximately 24 feet in length. Timber abutments will be constructed on either side of the drainage. The construction zone effect will consist of approximately 400 s.f. at each abutment and 2 feet on each side of the bridge. The abutment excavation will be completed with hand tools. Reconstruct trail tread and steps along bridge approach trails (145 l.f.). The construction zone effect will consist of approximately 2 feet on each side of the bridge approach trails. Equipment and materials will be brought to the site via the existing trail.

Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 260 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

24. North Boardwalk; Construct a new section of elevated wood boardwalk. The section will be approximately 650 feet in length, approximately 4 feet wide and

elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered two-person augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

L-9. Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 395 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

25. Drainage #2 Boardwalk; Construct a new section of elevated wood boardwalk. The section will be approximately 410 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered two-person augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

L-10. Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 200 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

26. Shell Beach Information Node and ADA Parking; This element will consist of re-striping two ADA parking spaces in an existing asphalt paved lot to serve the ADA trail adjacent to this area. Two small signs will be installed at the end of each stall to identify the spaces as ADA accessible. The construction zone effect will extend approximately 5 feet from the proposed edge of pavement. All construction equipment will be required to stay on existing paved road. Stabilized decomposed granite area approximately 200 s.f. adjacent to north side of proposed ADA parking spaces. Two interpretive panels will be installed in dark brown metal frames. Construction zone effect will be approximately 250 s.f., small mechanical rollers will be used with augers and hand equipment.
27. ADA Accessible Trail; Construct a 40-inch wide trail utilizing a pine pitch based liquid stabilizer blended into decomposed granite and compacted. The trail will be approximately 1,000 feet in length with 100% of the total distance constructed over existing trail varying in width from 3 feet to 7 feet of natural surface trail. Construction zone effect will include approximately 24 inches either side of trail for the entire length. The majority of the work to be done will be completed by

hand with the exception of a small grading vehicle and a mechanical roller for compaction.

L-12. Drainage #3: Remove existing wood bridge and construct a new bridge 38 l.f. in length and 230 l.f. of boardwalk, 4 feet wide. Concrete or timber abutments will be constructed on either side of the drainage. The construction zone effect will consist of approximately 400 s.f. at each abutment, 2 feet on each side of the bridge and 2 feet along each side of the new mowed trail. The abutment excavation will be completed with small mechanical equipment and by hand. Bridge materials will be accessed via the existing trail from the Shell Beach Parking Lot. Reconstruct approximately 175 feet of trail tread, 3 feet wide on bridge approach trail. The construction zone effect will consist of approximately 2 feet along each side of the trail tread reconstruction.

Realignment of trail approximately 250 feet. Construct realignment by mowed trail approximately 3 feet wide. The construction zone effect will consist of approximately 2 feet along each side of the trail realignment.

Close approximately 1185 feet of existing trail and restore to Coastal Prairie habitat.

Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 230 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be accessed via the existing trail from the Shell Beach Parking Lot.

L-13. Drainage #4: Remove existing wood bridge and construct a new bridge 52 ft. in length. Concrete or timber abutments will be constructed on either side of the drainage. The construction zone effect will consist of approximately 400 s.f. at each abutment and 2 feet on each side of the bridge. The abutment excavation will be completed with small mechanical equipment and by hand. Bridge materials will be accessed via an existing access road from Highway One at the old airplane house site.

Realign approximately 225 feet of trail, 3 feet wide on bridge approach trail. Realignment construction will be a combination of mowed trail and full bench construction. The construction zone effect will consist of approximately 2 feet along each side of the trail realignment.

Construct a wood retaining wall approximately 25 feet long by 3 feet high. The construction zone effect will consist of approximately of 4 feet upslope of wall alignment. Wall excavations will be completed with small mechanical equipment and hand tools.

Close approximately 400 l.f. of old trail. Restore area to Coastal Prairie habitat.

Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 155 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be accessed from Highway One via an existing access road to the old airplane house site, transported along the existing trail via small trail vehicles.

L-14. Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 260 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

L-15. Drainage #6: Remove existing wood bridge and construct a new bridge 40 feet in length including 315 l.f. of realignment of bridge approach trails. Timber abutments will be constructed on either side of the drainage. The construction zone effect will consist of approximately 400 s.f. at each abutment and 2 feet on each side of the bridge. The abutment excavation will be completed with small mechanical equipment and by hand. Bridge materials will be accessed via the existing trail. Realignment construction will be a combination of mowed trail and full bench construction. The construction zone effect will consist of approximately 2 feet along each side of the trail realignment.

Close approximately 190 feet of existing bridge approach trails and restore to Coastal Prairie habitat.

ADA Accessible Trail; Treat existing trail with Perma-Zyme soil stabilizing enzymes. The trail will be approximately 500 feet in length with the enzyme solution mixed into the top 4 inches of native soil surface. The majority of the work to be done will be completed by hand with the exception of a small grading vehicle and a mechanical roller for compaction.

L-16: ADA Accessible Trail; Treat existing trail with Perma-Zyme soil stabilizing enzymes. The trail will be approximately 400 feet in length with the enzyme solution mixed into the top 4 inches of native soil surface. The majority of the work to be done will be completed by hand with the exception of a small grading vehicle and a mechanical roller for compaction.

28. Drainage #7 New Bridge; This drainage crossing will consist of one wood bridge of approximately 60 feet in length. Concrete abutments will be

constructed on either side of the drainage. A 3 foot wide mowed trail connecting the bridge to existing trail on either side will include mowing along existing 24 inch wide informal trail for approximately 700 l.f. The construction zone effect will consist of approximately 400 s.f. at each abutment and 5 feet on each side of the bridge and 2 feet along each side of the new mowed trail. The abutment excavation will be completed with small mechanical equipment and by hand. Concrete for the abutments will be pumped from a mobilization location near Highway 1.

L-17. Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 655 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

Close approximately 568 l.f. of existing trail and restore to Coastal Prairie habitat.

ADA Accessible Trail; Treat two existing trail segments with Perma-Zyme soil stabilizing enzymes. The first segment will be approximately 200 feet in length with the enzyme solution mixed into the top 4 inches of native soil surface. The second segment will be approximately 250 feet in length with the enzyme solution mixed into the top 4 inches of native soil surface. The majority of the work to be done will be completed by hand with the exception of a small grading vehicle and a mechanical roller for compaction.

ADA Accessible Trail: Rehabilitate 1,800 l.f. of existing gravel surface road with 4" of 3/4" aggregate base rock to STA 211+00. Surface will be compacted to provide a firm and stable surface.

29. Information Node #3; Stabilized decomposed granite area approximately 200 s.f. adjacent to west side of existing gravel service road. Two interpretive panels will be installed in dark brown metal frames. Construction zone effect will be approximately 250 s.f., small mechanical rollers will be used with augers and hand equipment.
30. Portuguese Beach Comfort Station and Beach Access; Demolish existing concrete block (150 s.f.) vault comfort station and replace with wood sided (150 s.f.) vault comfort station. Repair of approximately 200 l.f. of existing beach access trail is included at this site. The trail improvements will be within the existing trail tread and include repair of steps and drainage improvements. Construction zone effect will include approximately 250 s.f. of area. Construction equipment will include concrete trucks on the service road and medium sized tractors for demolition and construction.

31. Schoolhouse Beach Comfort Station and Beach Access; Demolish existing concrete block (150 s.f.) vault comfort station and replace with wood sided (150 s.f.) vault comfort station. Repair of approximately 280 l.f. of existing beach access trail is included at this site. The trail improvements will be within the existing trail tread and include removal of deteriorating asphalt, installation of at grade timber steps and drainage improvements. Construction zone effect will include approximately 250 s.f. of area. Construction equipment will include concrete trucks on the service road and medium sized tractors for demolition and construction.

Project Construction

See above Project Description for construction techniques. Construction dates for Phase I were September 2001 - April 2004. Construction is estimated to begin on Phase II in December 2005. It will continue, as funding and weather allow, until completion. Construction season typically runs between May-December.

SUMMARY OF MITIGATION MEASURES

(Corrections and Additions indicated below have been incorporated into this section.)

MITIGATION MEASURE – SPECIAL STATUS PLANTS AND WILDLIFE

- a) Special Status Plants: Botanical monitors shall be on-site during all phases of construction in those areas where sensitive plant species have been found. Monitors shall instruct work crews to avoid both direct and indirect impacts to any of these plants where feasible. Trail maintenance around Special Status plants shall favor avoidance or trimming of vegetation, rather than clearing the ground of vegetation along trail edges.
- a) Special Status Plants: Mitigation will consist of closure and restoration of approximately 2800 l.f. of old trails. Where feasible, native plants salvaged from areas of new construction within the zone of impact will be relocated to abandoned trail sections. Jute netting will be laid on closed trail for seed capture and to speed the process of revegetation.
- a) Special Status Plants: Perma-Zyme treatment north of Drainage #7 will be shortened by 90 l.f. beginning directly north of the bridge thereby avoiding any impacts to *Sidalcea malviflora* ssp. Prior to the start of construction, a DPR-qualified Resource Ecologist will identify locations and instruct construction supervisors in ways to recognize and avoid the population.
- a) Special Status Wildlife: To lessen the potential for nest disturbance of northern harriers, prior to construction, a qualified State Park ecologist shall instruct the work crews on how to identify harriers and their nesting behavior. If nesting behavior is observed during any construction activity, the crews shall immediately stop work in the area of disturbance and notify a Senior or Associate State Park Resource Ecologist.
- a) Special Status Wildlife: Rock climbing activities on the large outcroppings toward the northern end of the Kortum trail should be re-evaluated for the potential of this

activity to preclude nesting.

MITIGATION MEASURE – SENSITIVE NATURAL COMMUNITIES

- b) Sensitive Natural Communities – Botanical monitors shall be onsite during all phases of construction where the trail passes through sensitive natural communities.

MITIGATION MEASURE – WETLANDS

- Botanical monitors shall be onsite during all phases of construction where the trail passes through wetlands. Areas of permanent wetland fill shall be mitigated through on-site, in kind enhancement at a 2:1 ratio. Areas of shaded wetland impacts shall be mitigated through on-site, in kind enhancement at a 1:1 ratio. Areas of construction disturbance shall be mitigated through appropriate erosion control measures and shall be monitored for natural revegetation. Should these areas of construction impacts fail to meet the criteria established in the attached mitigation plan for natural revegetation, then these areas will be further enhanced through revegetation or weeding efforts by park staff. Mitigation efforts shall be monitored for a period of five years with annual reports submitted to COE and Sonoma County. Mitigations for Phase I as described in Appendix D: Mitigation Plan shall apply to all areas where wetlands will be impacted by the project. Mitigations for Phase II as described in Appendix H: Mitigation Measures, Monitoring, and Reporting Program shall apply to all areas where wetlands will be impacted by the project.

MITIGATION MEASURES - CULTURAL

-
- 3. CA-SON-365/H: A new bridge is slated for Drainage #6 in Zone P. SON-365/H is a prehistoric shell midden with historic component located on both sides of the creek. The northern footing for the bridge poses a threat to the prehistoric aspect of the site, and will need to be mitigated. Mitigation will consist of relocating the new bridge approximately 100 feet upstream of the existing site, thus avoiding potential impacts to SON-365/H.
- CA-SON-356 (Zone H), SON-354 (Zone K), SON-353 (Zones K/L), SON-350 (Zone Q): These four prehistoric shell middens are located alongside areas of the existing trail that are to be retained in their current condition. The project as designed does not pose a threat to these sites. However, they will be monitored during the course of the project to ensure that there is no indirect or unexpected impact.
- 6. A paleontologist shall be consulted to review all known and documented potential sites along the Sonoma Coast and to survey all trail sections where there is a known potential for paleontological resources. The trail crew shall be instructed to avoid ground disturbance or vegetation clearing in any areas where paleontological sites are found. If significant paleontological resources are identified along or adjacent to trail corridors, appropriate mitigation measures will be identified and implemented.

MITIGATION MEASURE – EARTHQUAKE EFFECTS
<ul style="list-style-type: none"> ▪ a(i) It is difficult to mitigate against the potential surface rupture from an earthquake along the San Andreas Fault. This project involves only construction or rehabilitation of trails and the replacement of four bridges. If fault rupture occurs, affected sections of trails may need repair. The bridges do not appear to be underlain by a known fault. Appropriate seismic requirements should be followed during design and construction of the bridges.
<ul style="list-style-type: none"> ▪ a(ii) Trails should be able to withstand strong seismic shaking with little or no damage. The bridges must be designed and constructed to withstand the effects of a potential earthquake with a maximum moment magnitude of 7.6 to 7.9, and a ground acceleration of 0.6 to 0.8g.
<ul style="list-style-type: none"> ▪ a(iii) Portions of the trails located on the beach sands or other loose alluvial materials may be subject to liquefaction during an earthquake. Since relocation is most likely not an option, plan for potential repair of portions of the trails if liquefaction occurs. Any fills required should be properly engineered and compacted to minimize liquefaction effects.
<ul style="list-style-type: none"> ▪ a(iv) To mitigate against the potential for seismically induced landslides, trails will be kept away from the edge of the coastal bluff. Trails will not be constructed across any known landslides.
MITIGATION MEASURE – SOIL EROSION
<ul style="list-style-type: none"> ▪ b) Trails shall be constructed such that rainfall runoff is not concentrated in one direction, resulting in potential erosion. For the bridge sites, foundations shall be excavated by hand, resulting in fewer disturbances than if heavy equipment were used. Any stockpiled soil shall be covered in the event of rainfall to prevent runoff. During the construction of bridges and approach trails, silt fencing will be installed to prevent soil and debris from entering drainage channels and from traveling down slope out of the construction zone. Construction shall be scheduled to avoid rainy conditions, if possible.
MITIGATION MEASURE – HYDROLOGY AND WATER QUALITY
<ul style="list-style-type: none"> ▪ Mitigation or impact avoidance measures regarding hydrologic and water quality issues will be developed through the consultation and permit process of the Regional Water Quality Control Board, Army Corps of Engineers and the County of Sonoma. ▪ j) Avoid the construction of permanent facilities along the coastal terraces and bluffs. This is already the case for much of the proposed project.
MITIGATION MEASURE – LAND USE AND PLANNING
<ul style="list-style-type: none"> ▪ b) Where ever possible, minimize the use of materials or techniques that may result in the development of permanent features within Sonoma Coast State Beach.
MITIGATION MEASURE - NOISE

- | |
|--|
| ▪ To reduce the impact of increased noise on humans, construction shall be limited to daylight hours only and visitors will be informed through signing and the media that construction activities are to be expected during the three month period. |
|--|

MITIGATION MEASURE - RECREATION
--

- | |
|--|
| ▪ b) Refer to the mitigation section under BIOLOGICAL ENVIRONMENT. |
|--|

CORRECTIONS AND ADDITIONS

Corrections and additions included in this Supplement to the Sonoma Coast Trail Rehabilitation and Development Project MND could result in substantial changes to the circumstances under which the project will be undertaken, new significant environmental effects, or a substantial increase in the severity of previously identified significant effects, as identified in CCR §15162, *et seq*, thereby requiring the preparation of a subsequent MND or EIR. However, these changes and potential effects can be identified with minor additions and changes to the previous MND; per CCR §15163(a)(1 & 2), this Supplement to an MND is, therefore, sufficient to identify and address these conditions and revisions, and preparation of a Subsequent MND is no longer required.

The following corrections, additions, and deletions will supplement and, where contradictory, supersede the applicable portions of the previously certified Final MND for this project. Additions and corrections are underlined; strikeout indicates a deletion. In some cases, in areas where there were many individual changes, an entire paragraph or section was deleted and re-written, even if portions of the narrative remained the same in both versions. This was done for ease of presentation and public review. Minor punctuation, spelling, and grammatical corrections that contribute to ease of understanding, but have no significant impact on the content, have not been included in this document.

Chapter 2, Page 9, Section 2.3, Background and Need for the Project

Text changed as indicated below:

The Sonoma Coast Trail Rehabilitation and Development Project consists of ~~two~~ several interrelated and interconnected sub-projects that were identified and designed by The California Department of Parks and Recreation (DPR). This ~~Initial Study and Mitigated Negative Declaration~~ document addresses and reviews ~~the two~~ these sub-projects as one for the purposes of compliance under the California Environmental Quality Act. Each of these ~~two~~ sub-projects contains numerous work elements, which are identified in the Project Description section of this document. Phase I, which was discussed and evaluated in the original 9/7/01 MND, consists of two sub-projects. Phase I work was completed in 2004. The first sub-project is was funded through the Department's Capital Outlay program and was identified as "Sonoma Coast State Beach - Trail Rehabilitation and Development" (Coastal Trail). The second sub-project ~~is~~ was funded from the Department's "Deferred Maintenance Bond Funds" and was identified as "Repair Coastal Access Trails" (Beach Access Trails). Phase II is a continuation of the Coastal

Trail portion of Phase I and is funded by a grant from the California Coastal Conservancy. It focuses on the Kortum Trail between Goat Rock Beach and Wright's Beach. Phase II work is addressed in this Supplement to the MND. Collectively, the entire project as proposed and reviewed under this supplemental environmental document is called the Sonoma Coast Trail Rehabilitation and Development Project. This Draft Supplement to the MND for the Sonoma Coast Trail Rehabilitation and Development Project, along with the previously adopted Final MND (SCH#2001062029), will constitute the Final MND for the Sonoma Coast Trail Rehabilitation and Development Project at Sonoma Coast State Beach, following public review and incorporation of any resulting changes.

~~The need for both of these sub-projects is similar and related.~~ The existing coastal trail system has been developed over a number of years without an overall plan. Some of the resulting trails are poorly located, steep and narrow with precipitous drop-offs. The situation has also encouraged visitors to create their own "volunteer" trails that are not designed or located according to any standards. The poorly aligned trails cause erosion and other resource damage. Many segments of this trail are in seasonal wetlands, making for difficult conditions during the winter and spring months. Continued use during this time of year is harmful to wetland flora, degrades water quality, increases erosion of trail surface and leads to gullyng in some instances, as hikers enlarge the area of impact in attempts to avoid wet areas. Interpretation and way-finding information is minimal at best and is in need of updating and enhancement.

Summary of change and significance

Phase II was added to the project to protect wetlands from hiking-related impacts. The rewording introduces Phase II and its funding source and designates all project components as being under the umbrella of the Sonoma Coast Trail Rehabilitation and Development Project. Impacts to wetlands were added to the need for the project, as this is a primary reason for the undertaking of the project.

Finding

Not applicable.

Project Description/ Scope of Project

Text changed as indicated below:

The Sonoma Coast Trail Rehabilitation and Development Project proposes to create: approximately 2.3 miles of newly mowed trail, rehabilitate approximately 2.1 miles of existing trail, realign approximately 540 l.f. of trail, install 4,000 4,650 linear feet (l.f.) of ADA (Americans with Disabilities Act) hardened trail surface to meet ADA (Americans with Disabilities Act) compliance, install 4,060 4,260 l.f. of new boardwalk, replace four bridges, install three new bridges, install six new interpretive panels, replace three existing restrooms, restripe one parking area, and regrade another parking area. All work will be performed within public areas of the Sonoma Coast State Beach, Sonoma County.

Summary of change and significance

Indicates additions to the project to take place in Phase II.

Finding

Not applicable.

Chapter 2, Project Description, Section 2.5

Work elements of the Sonoma Coast Trail Rehabilitation and Development project are described below in separate sections for each sub-project. The elements are identified in consecutive order and combined for identification on the attached maps (L- designated map numbers indicate work items planned for Phase II). (~~numbers in triangles~~). More detailed plans can be obtained from: California State Parks, Northern Service Center, One Capitol Mall, Suite #500, Sacramento, CA 95814 North Bay District Headquarters, P.O. Box 123, 25381 Steelhead Blvd., Duncans Mills, CA 95430.

COASTAL TRAIL SUB-PROJECT

The intent of this sub-project is to improve the visitor safety, reduce existing impacts to resources, enhance interpretation and way-finding and improve the visitor's recreational experience. The repairs to the beach access trails will require the same *Trio* maintenance mentioned above with the addition of timber trail steps installed within the existing trail tread. In Phase II, in order to comply with current ADA standards, four segments of trail will be treated with the soil stabilizing enzyme Perma-Zyme. Perma-Zyme is a non-toxic formulation of enzyme-rich materials manufactured through a natural fermentation process using sugars and other 100% natural, organic compounds. When mixed with water and applied during compaction, the enzymes act on the soil's organic fines through a catalytic bonding process which produces a strong, durable, water resistant surface. Perma-Zyme will be applied to the top four (4) inches of native soil on 1,850 l.f. of existing trails. An additional 1,800 l.f. of existing gravel road, which is used as trail, will be rehabilitated and compacted to meet ADA standards. See attached mapping for project locations.

L-6. Install 12 ft. puncheon across drainage.

Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 265 feet in length along the existing trail alignment, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

Trail Realignment and new boardwalk approximately 210 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade.

Close old trail, approximately 400 feet, 4-feet wide, and restore area to Coastal Prairie habitat.

L-7. Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 570 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

Close old trail, approximately 95 feet, 3-feet wide, and restore area to Coastal Prairie habitat.

L-8. Drainage #1: Remove existing wood bridge and install new wood bridge of approximately 24 feet in length. Timber abutments will be constructed on either side of the drainage. The construction zone effect will consist of approximately 400 s.f. at each abutment and 2 feet on each side of the bridge. The abutment excavation will be completed with hand tools. Reconstruct trail tread and steps along bridge approach trails (145 l.f.). The construction zone effect will consist of approximately 2 feet on each side of the bridge approach trails. Equipment and materials will be brought to the site via the existing trail.

Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 260 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

L-9. Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 395 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

L-10. Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 200 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via

small trail vehicles.

L-12. Drainage #3: Remove existing wood bridge and construct a new bridge 38 l.f. in length and 230 l.f. of boardwalk, 4 feet wide. Concrete or timber abutments will be constructed on either side of the drainage. The construction zone effect will consist of approximately 400 s.f. at each abutment, 2 feet on each side of the bridge and 2 feet along each side of the new mowed trail. The abutment excavation will be completed with small mechanical equipment and by hand. Bridge materials will be accessed via the existing trail from the Shell Beach Parking Lot. Reconstruct approximately 175 feet of trail tread, 3 feet wide on bridge approach trail. The construction zone effect will consist of approximately 2 feet along each side of the trail tread reconstruction.

Realignment of trail approximately 250 feet. Construct realignment by mowed trail approximately 3 feet wide. The construction zone effect will consist of approximately 2 feet along each side of the trail realignment.

Close approximately 1185 feet of existing trail and restore to Coastal Prairie habitat.

Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 230 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be accessed via the existing trail from the Shell Beach Parking Lot.

L-13. Drainage #4: Remove existing wood bridge and construct a new bridge 52 ft. in length. Concrete or timber abutments will be constructed on either side of the drainage. The construction zone effect will consist of approximately 400 s.f. at each abutment and 2 feet on each side of the bridge. The abutment excavation will be completed with small mechanical equipment and by hand. Bridge materials will be accessed via an existing access road from Highway One at the old airplane house site.

Realign approximately 225 feet of trail, 3 feet wide on bridge approach trail. Realignment construction will be a combination of mowed trail and full bench construction. The construction zone effect will consist of approximately 2 feet along each side of the trail realignment.

Construct a wood retaining wall approximately 25 feet long by 3 feet high. The construction zone effect will consist of approximately 4 feet upslope of wall alignment. Wall excavations will be completed with small mechanical equipment and hand tools.

Close approximately 400 l.f. of old trail. Restore area to Coastal Prairie

habitat.

Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 155 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be accessed from Highway One via an existing access road to the old airplane house site, transported along the existing trail via small trail vehicles.

L-14. Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 260 feet in length, approximately 4 feet wide and elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

L-15. Drainage #6: Remove existing wood bridge and construct a new bridge 40 feet in length including 315 l.f. of realignment of bridge approach trails. Timber abutments will be constructed on either side of the drainage. The construction zone effect will consist of approximately 400 s.f. at each abutment and 2 feet on each side of the bridge. The abutment excavation will be completed with small mechanical equipment and by hand. Bridge materials will be accessed via the existing trail. Realignment construction will be a combination of mowed trail and full bench construction. The construction zone effect will consist of approximately 2 feet along each side of the trail realignment.

Close approximately 190 feet of existing bridge approach trails and restore to Coastal Prairie habitat.

ADA Accessible Trail: Treat existing trail with Perma-Zyme soil stabilizing enzymes. The trail will be approximately 500 feet in length with the enzyme solution mixed into the top 4 inches of native soil surface. The majority of the work to be done will be completed by hand with the exception of a small grading vehicle and a mechanical roller for compaction.

L-16: ADA Accessible Trail: Treat existing trail with Perma-Zyme soil stabilizing enzymes. The trail will be approximately 400 feet in length with the enzyme solution mixed into the top 4 inches of native soil surface. The majority of the work to be done will be completed by hand with the exception of a small grading vehicle and a mechanical roller for compaction.

L-17. Boardwalk: Construct a new section of elevated wood boardwalk. The section will be approximately 655 feet in length, approximately 4 feet wide and

elevated approximately 16 inches above existing grade. The construction zone effect would extend approximately 3 feet on either side of the boardwalk along its entire length. The equipment used will include gas powered augers and hand power tools. Construction materials will be transported along the existing trail via small trail vehicles.

Close approximately 568 l.f. of existing trail and restore to Coastal Prairie habitat.

ADA Accessible Trail: Treat two existing trail segments with Perma-Zyme soil stabilizing enzymes. The first segment will be approximately 200 feet in length with the enzyme solution mixed into the top 4 inches of native soil surface. The second segment will be approximately 250 feet in length with the enzyme solution mixed into the top 4 inches of native soil surface. The majority of the work to be done will be completed by hand with the exception of a small grading vehicle and a mechanical roller for compaction.

ADA Accessible Trail: Rehabilitate 1,800 l.f. of existing gravel surface road with 4" of 3/4" aggregate base rock to STA 211+00. Surface will be compacted to provide a firm and stable surface.

Summary of change and significance

Indicates additions to the project to take place in Phase II and their corresponding number on the construction plans. Changes for clarity and consistency.

Finding

Not applicable.

Chapter 2, Page 13, Section 2.6 Project Construction

Text changed as indicated below.

See above Project Description for construction techniques. ~~The anticipated start of construction for the Coastal Trail Sub-Project is April of 2002 with the construction start date for the Beach Access Trail Sub-Project occurring September of 2001. Construction dates for Phase I were September 2001- April 2004. Construction is estimated to begin on Phase II in December 2005. It will continue, as funding and weather allow, until completion. Construction season typically runs between May-December.~~

Summary of Change and Significance

Clarifies approximate dates of construction for Phase II.

Finding

Not applicable.

Chapter 3, Page 19, Section I Aesthetics, Discussion

Text changed as indicated below.

The Furlong Gulch bridge, ~~which is the largest of the three~~, will not be visible from the highway, but is easily viewed looking eastward from the beach.

Summary of Change and Significance

Reflects change in number of bridges to be built or replaced with the addition of Phase II.

Finding

Not applicable.

Chapter 3, Page 24, Section IV. Biological Resources, Existing Site Conditions, Methods, Botanical Surveys

Text changed as indicated below.

Phase II plant surveys were conducted May-July and September 2004. During the 2004 surveys, the survey methodology involved walking the entire length of the trail and recording all plant species observed within 15 feet of both sides of the trail, including Special Status plants, along all trail sections, not only where construction, bridges or rehabilitation are proposed. The results are presented in Appendix G.

The 2001 and 2004 surveys resulted in conflicting plant identifications for *Sidalcea malviflora* ssp. and *lasthenia* ssp. Rather than attempt to distinguish the subtle differences, we chose a conservative approach and considered the plants as the listed 1b species. To quantify impacts, the following methods were used.

Site-specific population surveys were conducted in May, June and July 2005 with the purpose of quantifying the impacts of boardwalk and bridge construction in areas containing plant populations with conflicting identifications from the 2001 and 2004 surveys. For the survey of *Sidalcea malviflora* ssp. at Climbing Rock, the total area of a specific population was determined. Thirty random samples consisting of square meter plots within each population area were measured for total plant density as well as plant density within the project impact area. With these numbers, the percentage of impact was obtained.

Due to the ubiquitous nature of *Calystegia purpurata* ssp. in the open habitats of the study zone, rather than attempting to note the location of individual plants at Drainage #1, areas with large aggregations in both the general area of the proposed project as well as the impact zone were identified. With these numbers, the percentage of impact was obtained.

Summary of Change and Significance

Reflects additional botanical surveys conducted in Summer 2004 and site specific surveys in 2005 as a result of the addition of Phase II. Describes the methods used and clarifies distinctions between methods of the different surveys.

Finding

Not applicable.

Chapter 3, Page 27, Section IV. Biological Resources, Results, Special Status Plants; Mitigation Measure a).

Text changed as indicated below.

Results

Conflicting identifications between the Phase I & Phase II surveys led to additional site-specific population surveys in May, June and July 2005, using the methods described above. *Sidalcea malviflora* ssp. *purpurea*, and *Lasthenia macrantha* ssp. *macrantha* and ssp. *bakeri* are listed on CNPS List 1b and were identified in several locations along the Kortum Trail in 2001. Additional surveys in 2004 identified the plants as the unlisted *Sidalcea malviflora* ssp. *malvaeflora* and *Lasthenia* ssp. *californica*.

During the 2005 surveys, only one large population of *Sidalcea malviflora* sspp. on the southwest side of Climbing Rock was documented as being within the projected zone of impact of Phase II. Rather than attempt to distinguish the subtle differences between what are most likely subspecies integrades, the population was treated as the listed 1b variety and surveyed to obtain the total area of population, approximate number of plants within the area, and approximate number of plants within the impact zone. Table 1 presents the quantified impact.

Table 1. Sonoma Coast Trail: Total Estimated Impacts for <i>Sidalcea</i> Population at Climbing Rock	
Total Area of Population	3665 sq. m.
Total Estimated Population	>6000
Average Plants/1 meter plot	1.7
Total Percent Impacted	1.25%
Percent Shaded	.5%
Percent Construction Impacts	0.75%

During the Summer 2005 surveys, *Lasthenia macrantha* ssp. *macrantha* was determined by the Associate State Resource Ecologist to be *Lasthenia* ssp. *californica*. Selected samples were keyed with The Jepson Manual, Higher Plants of California using the distinguishing features of the phyllaries and the involucre plant parts. The root mass of the samples were keyed to be an annual (*Lasthenia* ssp. *californica*) rather than a perennial (*Lasthenia macrantha* ssp. *macrantha*). This conclusion corroborates the 2004 survey's identification that the species is the nonlisted *Lasthenia* ssp. *californica*.

Summer 2005 surveys identified *Calystegia purpurata* sspp, another integrade species not listed in either previous plant study along the Kortum Trail. A large population was identified in Drainage #1. Field surveys were conducted in June 2005 to quantify the

impact. Rather than attempt to distinguish the subtle differences between what are most likely subspecies integrades, the population was treated as the 1b listed variety and surveyed to obtain the total area of population, approximate number of plants within the area, and approximate number of plants within the impact zone. Table 2 presents the quantified impact.

Table 2. Sonoma Coast Trail: Total Estimated Impacts for Calystegia Population in Drainage 1	
Total Area of Population	100 feet of either side of trail alignment
Total Estimated Population	312
Total Plants within Impact Zone	10
Total Percent Impact	3.2%

Mitigation Measure a)

- a) Special Status Plants: **PHASE II:** Mitigation will consist of closure and restoration of 2800 l.f. of old trails. Where feasible, native plants salvaged from areas of new construction within the zone of impact will be relocated to abandoned trail sections. Jute netting will be laid on closed trail for seed capture and to speed the process of revegetation.

Summer 2005 surveys identified several occurrences of the integrade species *Sidalcea malviflora* ssp. on the trail north of Drainage #7 in the area planned for treatment with Perma-Zyme. Table 3 presents the population estimates.

Table 3: Sonoma Coast Trail: Population Estimates for Sidalcea Population North of Drainage 7	
Total Area of Population	540 sq. ft.
Total Estimated Population	35
Total Plants within Impact Zone	35

Implementation of the following mitigation measure will ensure that potential impacts to this population of *Sidalcea malviflora* ssp. will remain less than significant.

Mitigation Measure a)

- a) Special Status Plants: Perma-Zyme treatment north of Drainage #7 will be shortened by 90 l.f. beginning directly north of the bridge thereby avoiding any impacts to *Sidalcea malviflora* ssp. Prior to the start of construction, a DPR-qualified Resource Ecologist will identify locations and instruct construction supervisors in ways to recognize and avoid the population.

Summary of Change and Significance

Reflects additional information gathered in plant studies conducted in 2004. Addresses conflicting identifications between two plant surveys as well as describing additional results from site specific surveys done in 2005. Additions to Mitigation Measure a) for Phase II describe the proposed closure of currently used trail and relocation and avoidance of certain plants to reduce impacts to an insignificant level.

Finding

No change in original finding. Implementation of Mitigation Measures a) are expected to reduce any potential impacts to a less than significant level.

Chapter 3, Page 30, Section IV. Biological Resources, Results, Wetlands.

Text changed as indicated below.

WETLANDS

Wetlands comprise a substantial proportion of the project area. Of the 53 patches of vegetation sampled, it was determined that 30 of the 53 (57%) were dominated by wetland indicator species. This does not necessarily reflect the proportion of the project area that would pass through wetlands. Areas of permanent fill, impacts from shading, mowed trails and temporary construction related impacts were determined (refer to Table 44: Phase I; Table 5: Phase II). Primary wetland vegetation types encountered were a wet phase of coastal terrace prairie (palustrine emergent) and coastal riparian corridors (palustrine scrub-shrub and palustrine forest) along perennial drainages. Bold outlines of vegetation types on the maps indicate wetland areas that were found during the surveys (refer to MAPS section of Original MND).

Summary of Change and Significance

Reflects addition of wetland impacts associated with Phase II.

Finding

Not applicable.

Chapter 3, Page 32, Section IV. Biological Resources, Discussion c) Wetlands.

Text changed as indicated below.

PHASE II

During Phase II, 3200 linear feet of existing trail will be improved by constructing new boardwalk over wetland areas. Attempts were made during the project planning phase to relocate trails outside of wetland areas wherever possible. Due to the relatively high percentage of wetlands along the Sonoma Coast, very few sections of trail could feasibly be relocated outside of wetland habitat and still meet the goal of having a coastal connecting trail running from north to south. At Drainage #1, Drainage #3, Drainage #4, and Drainage # 6, the bridges cannot be located or constructed without impacting wetland areas; there are no other suitable locations outside of wetlands.

Boardwalk will be constructed using standard post and beam methods with 8 foot on center spacing. Permanent impacts to wetlands will result from post and ramp placement. For each 100 foot section of boardwalk, a total of 2.04 s.f. of wetland will be filled and 400 s.f of wetland will be impacted by shading. Temporary construction impacts will result in 600 s.f. of disturbance per 100 linear feet of boardwalk.

Bridge construction will impact wetlands where bridge abutments are placed, as well as

from shading impacts resulting from bridge spans. Bridges less than 30 feet in length will have one 8 s.f. abutment per side, resulting in 16 s.f. of permanent impacts. Bridges greater than 30 feet in length will have one 16 s.f. abutments per side, resulting in 32 s.f. of permanent impacts.

Permanent impacts associated with filling of wetlands are proposed to be mitigated at a ratio of 2:1. Permanent impacts associated with the shading of wetlands are proposed to be mitigated at a ratio of 1:1. Temporary impacts associated with construction are proposed to be mitigated at a ratio of 1:1.

Phase I has successfully reduced impacts to wetlands through the construction of pedestrian boardwalk. Hikers no longer walk directly on wetland vegetation, resulting in minimized impacts to plants and water quality, and minimized erosion. Shaded areas of impact under the boardwalk have successfully revegetated.

Table 5 provides the areas impacted by Phase II of the project, the proposed mitigation ratio, the type of mitigation proposed, and the total areas to be mitigated. Specific mitigations for Phase II as described in Appendix F: Mitigation Measures, Monitoring, and Reporting Program shall apply to all areas where wetlands will be impacted by the project.

Table 5. SONOMA COAST TRAIL WETLAND IMPACTS AND PROPOSED WETLAND MITIGATION PHASE II

WETLAND COMMUNITY TYPE (Cowardin, 1979)	Palustrine Emergent		Palustrine Scrub-Shrub	
Area of Impact	ACOE	CCA	ACOE	CCA
Permanent Fill	262 sq. ft.	(383 sq. ft.)	285 sq. ft.	(285 sq. ft.)
Shaded Area	7460 sq. ft.	(12800 sq. ft.)	1964 sq. ft.	(1964 sq. ft.)
Construction	11190 sq. ft.	(19200 sq. ft.)	4974 sq. ft.	(4974 sq. ft.)
Mowed Areas	1425 sq. ft.	(1425 sq. ft.)	0 sq. ft.	(0 sq. ft.)
Proposed Mitigation Ratio				
Permanent Fill	2 to 1			
Shaded Area	1 to 1			
Construction	1 to 1			
Proposed Mitigation Method				
Permanent Fill	Creation or Enhancement			
Shaded Area	Creation or Enhancement			
Construction	Monitoring or Revegetation			
Proposed Mitigation Area	ACOE	CCA	ACOE	CCA
Permanent Fill	524 sq. ft.	(766 sq. ft.)	570 sq. ft.	(570 sq. ft.)
Shaded Area	7460 sq. ft.	(12800 sq. ft.)	1964 sq. ft.	(1964 sq. ft.)
Total Created or Enhanced Habitat	7984 sq. ft.	(13566 sq. ft.)	2534 sq. ft.	(2534 sq. ft.)
Construction	11190 sq. ft.	(19200 sq. ft.)	4974 sq. ft.	(4974 sq. ft.)

(brackets) denote wetland totals inclusive of wetlands as defined under the California Coastal Act.

Table 5. (CONTINUED)

WETLAND COMMUNITY TYPE (Cowardin, 1979)	Palustrine Forested	
Area of Impact	ACOE	CCA
Permanent Fill	32 sq. ft.	(32 sq. ft.)
Shaded Area	160 sq. ft.	(160 sq. ft.)
Construction	2040 sq. ft.	(2040 sq. ft.)
Mowed Areas	810 sq. ft.	(810 sq. ft.)
Proposed Mitigation Ratio		
Permanent Fill	2 to 1	
Shaded Area	1 to 1	
Construction	1 to 1	
Proposed Mitigation Method		
Permanent Fill	Creation or Enhancement	
Shaded Area	Creation or Enhancement	
Construction	Monitoring or Revegetation	
Proposed Mitigation Area	ACOE	CCA
Permanent Fill	64 sq. ft.	(64 sq. ft.)
Shaded Area	160 sq. ft.	(160 sq. ft.)
Total Created or Enhanced Habitat	224 sq. ft.	(224 sq. ft.)
Construction	2040 sq. ft.	(2040 sq. ft.)

(brackets) denote wetland totals inclusive of wetlands as defined under the California Coastal Act.

Summary of change and significance

Reflects additions to project in Phase II. Minor changes in language to maintain consistency in describing two Phases. Describes bridge construction techniques and quantification of wetland impacts of Phase II. Presents a table of quantified wetland impacts and proposed mitigation numbers for Phase II.

Finding

Supplement to the MND
Sonoma Coast Trail
Rehabilitation and Development Project
Sonoma Coast State Beach

Not applicable.

Chapter 3, Page 36, Section V. Cultural Resources, Mitigation Measure Cultural- 3.
Text changed as indicated below.

MITIGATION MEASURE- Cultural

3. CA-SON-365/H: A new bridge is slated for Drainage #6 in Zone P. SON-365/H is a prehistoric shell midden with historic component located on both sides of the creek. The northern footing for the bridge poses a threat to the prehistoric aspect of the site, and will need to be mitigated. Mitigations will consist of <u>relocating the bridge approximately 100 feet upstream of the existing site, thereby avoiding potential impacts to SON-365/H.</u>

Summary of change and significance

Reflects changes in mitigation measure to avoid cultural site altogether, thereby avoiding any potential impacts.

Finding

No change in original findings. Implementation of Mitigation Measure Cultural-3 will avoid any impacts to cultural site CA-SON-365/H.

Chapter 3, Page 38, Section VI. Geology and Soils, Discussion a(i) and Mitigation Measure Earthquake Effects a(i), a(ii).

Text changed as indicated below.

a(i) The project sites are located within the San Andreas Fault Zone, which is delineated on the Alquist-Priolo Earthquake Fault Zone Map (CDMG, 1974). This could result in a potentially significant impact. Damage to trails may occur if the ground surface rupture intersects the trail. It appears that no fault is mapped in the area of ~~Furlong Gulch~~ where ~~two~~ the foot bridges are planned. However, all faults may not be located within the San Andreas Fault Zone.

MITIGATION MEASURE- EARTHQUAKE EFFECTS

- | |
|---|
| <ul style="list-style-type: none">▪ a(i) It is difficult to mitigate against the potential surface rupture from an earthquake along the San Andreas Fault. This project involves only construction or rehabilitation of trails, <u>and the replacement of four bridges</u>. If fault rupture occurs, affected sections of trails may need repair. The two bridges do not appear to be underlain by a known fault. Appropriate seismic requirements should be followed during design and construction of the bridges.▪ a(ii) Trails should be able to withstand strong seismic shaking with little or no damage. The two bridges must be designed and constructed to withstand the effects of a potential earthquake with a maximum moment magnitude of 7.6 to 7.9, and a ground acceleration of 0.6 to 0.8g. |
|---|

Summary of change and significance

Changes reflect an accurate count of bridges to be replaced and installed for both Phases of the project.

Finding

No change in original finding.

Chapter 3, Page 39, Section VI. Geology and Soils, Discussion b) and Mitigation Measure Soil Erosion b).

Text changed as indicated below.

MITIGATION MEASURE- SOIL EROSION

b) Trails shall be constructed such that rainfall runoff is not concentrated in one direction, resulting in potential erosion. For the bridge sites, foundations shall be excavated by hand, resulting in less disturbance <u>fewer disturbances</u> than if heavy equipment were used. Any stockpiled soil shall be covered in the event of rainfall to prevent runoff into Furlong Gulch. <u>During the construction of bridges and approach trails, silt fencing will be installed to prevent soil and debris from entering drainage channels and from traveling down slope out of the construction zone.</u> Construction shall be scheduled to avoid rainy conditions, if possible.

Summary of change and significance

Change in wording so as not to limit the covering of soil to areas near Furlong Gulch. Bridges will be constructed in more places during Phase II, language was changed to show that there will be measures taken to avoid any runoff at all bridge sites. Describes the additional mitigation consisting of silt fencing which will address any potential erosion impacts.

Finding

No change in original finding. Implementation of Mitigation Measure Soil Erosion is expected to reduce any potential erosion impacts to a less than significant level.

Chapter 3, Page 43, Section IX. Land Use Planning, Environmental Setting and Discussion b).

Text changed as indicated below.

Environmental Setting:

~~The California Department of Parks and Recreation has not yet prepared a General Plan for the Sonoma Coast State Beach. Public Resources Code Section 5002.2 (a) states:~~

~~“Following classification or reclassification of a unit by the State Park and~~

~~Recreation Commission, and prior to the development of any new facilities in any previously classified unit, the department shall prepare a general plan or revise any existing plan, as the case may be, for the unit.~~

~~(c) Notwithstanding the requirements of subdivision (a), the department is not required to prepare a general plan for a unit that has no general plan or to revise an existing plan, as the case may be, if the only development contemplated by the department consists of the repair, replacement, or rehabilitation of an existing facility; the construction of a temporary facility, so long as such construction does not result in the permanent commitment of a resource of the unit; any undertaking necessary for the protection of public health or safety; or any emergency measure necessary for the immediate protection of natural or cultural resources; or any combination thereof at a single unit. Any development is subject to the requirements of the California Environmental Quality Act (Division 13 (commencing with Section 21000)).~~

The California Department of Parks and Recreation has prepared a Preliminary General Plan and Draft Environmental Impact Report (filed January 2004; SCH# 2003022116) that has undergone public review and is pending approval. The proposed project is consistent with the Preliminary Plan.

b) ~~Construction of and access to the Furlong Gulch bridge~~ bridges on Drainages #1, 4, and 6, however, will also involve some impact to wetland areas. Under the Coastal Act, and under the Sonoma County Local Coastal Plan, impacts to environmentally sensitive habitat areas, including wetlands, must be avoided unless it can be shown that there is no feasible alternative. If no feasible alternative exists, then mitigation must appropriately compensate for the impact such that there is no net loss of habitat. ~~If a bridge is to be placed across Furlong Gulch, then there is no alternative that will completely avoid the wetland and riparian areas.~~ An alternative that would only repair the existing trail, without placing a bridge in ~~this~~ these areas would not meet the objectives of the project. Without the bridges, park visitors will continue to cross the drainages at in its mouth sensitive areas to continue south or north along the Kortum Trail.

Summary of change and significance

Changes reflect the preparation of a Preliminary General Plan for the Sonoma Coast State Beach, indicate the status of the Plan, and place the proposed project within the context of the Plan. Changes also reflect the addition of multiple drainage crossings with the addition of Phase II.

Finding

Not applicable.

Chapter 3, Page 48, Section XII. Recreation, Discussion a).

Text changed as indicated below.

a) ~~The addition of three trail bridges~~ The replacement of four bridges and construction of elevated wood boardwalks will improve visitor experience.

Summary of change and significance

Changes reflect change in bridge number with addition of Phase II.

Finding

Not applicable.

Chapter 4, Page 52, References.

Text changed as indicated below.

Beidleman, Linda H. & Kozloff, Eugene N. 2003. *Plants of the San Francisco Bay Region: Mendocino to Monterey*. University of California Press, Berkeley.

California Native Plant Society. Online Rare & Endangered Plant Inventory.
<http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi>

Chapter 5, Page 54, List of Preparers.

Text changed as indicated below.

Beth Robinson, State Park Environmental Services Intern, North Bay District

Valerie Watt, Park & Recreation Specialist, North Bay District

Skaidra Smith-Heisters, State Park Environmental Services Intern, North Bay District

Gail Sevens, Associate Park & Recreation Specialist, Northern Service Center

Appendices-Attached

Appendix F: Phase II Project Plans

New, additional design graphics reflect the changed project description.

Appendix G: 2004 Plant Survey for Coastal Trail Project

New report on rare plants located on selected segments of the Coastal Trail, including the Kortum Trail.

Appendix H: Mitigation Measures, Monitoring & Reporting Program for Phase II:
Sonoma Coast Trail Rehabilitation and Development Project

Specific mitigations and monitoring measures for Phase II.

This Draft Supplement to the MND for the Sonoma Coast Trail Rehabilitation and Development Project, along with the previously adopted Final MND (SCH#2001062029), will constitute the Final MND for the Sonoma Coast Trail Rehabilitation and Development Project at Sonoma Coast State Beach, following public review and incorporation of any resulting changes.

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (DPR) has independently reviewed and analyzed the information contained in the Draft Supplement to the MND for the proposed project and finds that this document reflects the independent judgment of DPR. DPR, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and enforceable, and will be implemented as stated in the Final MND, including this Supplement.

Dave Boyd
Environmental Coordinator
California Department of Parks & Recreation
North Bay District

Date

Michael Stephenson
District Superintendent
North Bay District

Date